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ABSTRACT

The Commonwealth of Massachusetts has had a competency-based vocational instructor approval process for more than two and one-half decades. Perhaps the most important element in this process has been the vocational competency testing. Although some say that Massachusetts is out of step, others feel that Massachusetts has a well-established testing component and will soon be recognized for being in the forefront of competency-based teacher education. Court decisions since Griggs v. Duke Power Co. uphold the right of the state to use competency testing as a criterion for employment. Various cases, however, reinforce the notion that employment tests must be demonstrably job-related, should predict job performance, and must be content valid. Furthermore, due process is guaranteed in the Fourteenth Amendment, and the Civil Rights Act of 1964 prohibits discrimination. Massachusetts has developed a User's Manual for the Vocational Competency Testing Program, which describes procedures for validating tests and developing job-related tests and the Appeals Process. Recommendations have been made for validation studies. (Appendixes include a survey of necessity of occupational examinations for certification, uniform guidelines on employee selection, and vocational instructor approval requirements.) (YLB)

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MASSACHUSETTS:

OUT OF STEP OR AHEAD OF THE TIMES?

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DEFINITIONS

Some simple explanations and/or definitions are in order before the beginning of this paper. When one is immersed in the vocational education sector, some terms become commonplace. These terms have very particular meanings, which are indicated here:

Chapter 74 - Chapter 74 regulations of the Commonwealth of Massachusetts. This document spells out the so-called "Ten Approval Factors" which relate to:

- Organization
- Control
- Location
- Equipment
- Courses of Study
- Qualifications of Teachers
- Methods of Instruction
- Conditions of Admission
- Employment of Pupils
- Expenditures

The most extensive regulations in this Chapter of the General Law relate tothe approval of teachers. These are summarized in Appendix D and form the basis for the discussion of this paper.

Advisory Committee - A program advisory committee as defined in Chapter 74 regulations consists of representatives of local business and industry related to the program, organized labor, parents, and students. References in this paper to advisory committees are made to the business and industry personnel on such committees.

Approval - As defined in Chapter 74 regulations, the term "approval" is used in the statement: "In order to be eligible for State reimbursement under G.L. c. 74, a vocational education program must receive prior approval by the Commissioner of Education, acting through the Division of Occupational Education, as to those criteria set forth in G.L. c. 74, s.1...

Approval is given to those programs which demonstrate compliance with the "Ten Approval Factors" mentioned previously. In this paper, the term "Approval" is used exclusively to refer to the credentialing of vocational teachers under G.L. c. 74. To most readers, then, approval and certification are synonomous.

NOCTI - National Occupational Competency Testing Institute, with headquarters in Albany, New York was formed as a non-profit corporation in June 1973.

General policies are made by an Administrative Board, whose members are elected by the Consortium of States which forms NOCTI, to represent each of the ten regions of the United States. The Institute is governed by a Board of Trustees of recognized vocational educators selected from the consortium. representatives and leaders in occupational competency measurement.

ETS - Educational Testing Service

NTE - National Teachers Examination; a product of ETS.

RISE OF COMPETENCY TESTING

Valid work experience, college credit and competency testing are three elements of the vocational teacher approval process in the Commonwealth of Massachusetts. These three components are reflected in the certification requirements for trade and industry teachers in all 50 states (see Appendix A). There, the similarities cease to exist. Massachusetts has a unique certification agency. According to Aaron Miller (March, 1982):

> In 30 states, the state board of education controls teacher certification or delegates authority to a state agency which is assisted by an advisory council representing different segments of the teaching profession. There may or may not be a requirement that educators be represented in the agency itself. The agency makes recommendations to the state board concerning certification standards and procedures; the state board, however, has final authority for acceptance, execution and delegation of certification matters.
>
> Sixteen states have a teacher standards and practices board or commission which is advisory to the state board of education or its education agency. This is a special body with educators heavily represented in its membership. It has authority to establish criteria for certification standards, issue certificates, institute disciplinary action, develop teacher preparation standards and develop reciprocal agreements with other states.
>
> Two states have a fully independent teacher standards and practices board with legal jurisdiction over the preparation and certification of teachers. This type of commission has full and final authority to control certification standards and practices affecting teachers in the state.
>
> There are two states with certification agencies unlike those described above. One has a council on teacher education which is responsible for certification standards and procedures. In the other (Massachusetts), the Division of Occupational Education/ Office of Personnel Development* is responsible for certification.

* Office of Personnel Development is reported in Miller's article should be "Office of Professional Development."

On one thing there is agreement. The requirement for valid work experience has been the cornerstone of certification of vocational teachers since the Smith-Hughes Act of 1914. In federally reimbursed programs (Chapter 74 programs in Massachusetts) the law is clear that only persons with practical experience be allowed to teach. Massachusetts has one of the higher requirements (six years) in terms of years of experience than many other states (See Figure 1). This experience is carefully evaluated by the Office of Professional Development, Division of Occupational Education and confirmed by vocational competency testing.

Initial Research

In 1966, Kazanas and Kieft reported on an experimental project in Michigan to determine more effective vocational teacher certification procedures by means of competency examinations. Their study presented recommendations determined from competency examinations then in use in other states of the United States.

Competency exams for vocational teachers prior to the 1966 study were being used to some extent in California, District of Columbia, Kansas, Massachusetts, Michigan, New York, Oregon, Pennsylvania, South Carolina, Texas, and Wisconsin, although not necessarily for certification. Kazanas and Kieft included data on which vocational areas were being tested, types of tests used, who was tested and when, who developed the tests, the consequences of failing the test, how long the tests had been used, whether the tests had been standardized (validated), when revised, and problems encountered in test preparation and administration. The data was derived from questionnaires mailed to educators across the country.

The Michigan research group developed oral, written and performance tests for each Vocational area in Michigan from analyses of each trade content. Analysis of survey data from other states aided in exam construction. Several trade analyses were combined for each trade area to derive a comprehensive analysis which was reviewed by research staff and an appropriate teacher educator. Fifteen-hundred test items were prepared for each trade area. These were screened, evaluated, and divided into three forms for each trade area (each form = 300 items). The subcommittees which evaluated the written exams, also made recommendations on performance test content, and developed a list of experiences for testing. The conclusion was:

> If competency exams were put to maximum use, they will be very effective in (1) determining the technical knowledge and skills of teacher candidates, (2) increasing the number of vocational teachers (by allowing the elimination of unrealistic work/academic requirements), (3) indicating areas of weakness, and (4) improving the quality of teachers.

Formation of a National Consortium

In May of 1971, Gordon McMahon reported that Rutgers, via a grant from the U. S. Office of Education, had been successful in setting up a consortium of states which indicated a desire to participate in a nationwide vocational competency testing project. He stated,

> In the several meetings held relative to this project, it has become apparent that these states are extremely concerned about the need for better selection techniques for prospective teachers. Although several states have exerted considerable effort and spent sizable sums to develop and perfect occupational competency tests that may be used to evaluate prospective teachers, everyone concerned has been forced to recognize that the size of the task is almost beyond comprehension.

This consortium became known as the National Competency Testing Institute (NOCTI). This consortium is a non-profit educational corporation, organized in June 1973, with headquarters in Albary, New York. Currently, there are 46 states and the District of Columbia in the program as a Consortium of States governed by a Board of Trustees.

Establishment of the Office of Professional Development

The Commonwealth of Massachusetts has had a competency based vocational instructor approval process for more than two and one-half decades. Perhaps the most important element in this process has been the vocational competency testing, which is a requirement for all trade and industry candidates. Such testing, with both written and performance components, ensures an appropriate level of trade knowledge and skill among those individuals who aspire to teach these subjects to secondary school students. According to the Resnick and Carmody study (January, 1977) the real commitment to competency based vocational education in general, and thus competency based teacher approval, began with the inception of the Office of Professional Development. They stated that,

> The Office of Professional Development within the Division of Occupational Education, Massachusetts State Department of Education, was first established in 1971 under the auspices of former Associate Commissioner Charles H. Buzzel. The purpose of this office was to coordinate the approval of Occupational Education instructors throughout the Commonwealth as well as to administer the funds awarded to the State through the Education Professions Development Act (P.L. 90-35). Prior to the establishment of this office, the specific supervisor for each occupational area separately and individually approved instructors for his/her respective fields. The need for centralization of this function, as well as standardization of information concerning the approval process and criteria for approval, became clear as the number of vocational instructors greatly increased due to the expansion of regional vocational/technical schools throughout the Commonwealth of Massachusetts.

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In 1974, a study by the Office of Professional Development, Professional Development Planning Study, Morine 1974) proposed a centralized computer recordkeeping system for approved Chapter 74 of the Commonwealth personnel. The following year, 1975, a needs assessment package was developed by Fitchburg State College and the Massachusetts Department of Education (James and Antonellis). The results of this study indicated the need for additional programs of professional development at advanced levels to further prepare individuals to provide occupational education programs for youth and adults in the Commonwealth.

Dr. Robert Worthington of Career Development Associates reviewed OPD-sponsored Educational Professions Development Act projects state-wide. Among the recommendations of his study was the statement that certification or approval should be a special branch of the Office of Professional Development.

In 1976, the Massachusetts Board of Education published Policy on Occupational Education (including career education), placing identification and initial preparation of personnel, continuing professional development, and leadership development for Occupational Education within the jurisdiction of the Office of Professional Development. Subsequently, the State Department of Education moved toward competency based teacher approval with Chapter 847 of the laws of the Commonwealth. Several studies were funded. Among them was the work conducted by Resnick and Gardner of Boston University. In September 1977, they reported on a survey of vocational teacher and administrator certification requirements

across the United States. They mailed questionnaires to 50 state personnel development coordinators for vocational education. Their return rate for the forms was 82 percent. Unfortunately, since anonymity was guaranteed, results were not given by state or district, but by program (i.e., health occupations, distributive education). Data obtained included:

- Years of work experience required for certification
- Semester credits required for certification
- Semester hours or degree requirements prior to first teaching assignment
- Certification requirements for directors of vocational education schools
- Certification requirements for middle managers in vocational education
- Number of states with performance exams required for certification
- Academic requirements for admission to trade/technical examination
- Summary of examination formats
- Who develops examinations
- Who administers and grades examinations
- Who coordinates the certification process
- Types of vocational program delivery systems
- Functions of professional development personnel

Establishment of the Vocational Competency Testing Program

In reviewing the results of the Resnick and Gardner study (see figure 1), it is apparent that Massachusetts is atypical in several ways. Trade and industrial education teachers are required to have more experience before teaching than in most other states and fewer semester hours of academic preparation. In addition, the approval process is conducted by State Department personnel, and not through a teacher training institution. Since 1977, Massachusetts has placed the responsibility of teacher approval squarely within the Office of Professional Development, and the money to fund the development and administration of Vocational Competency Tests was acquired through a Federal Grant during the year 1978. The purpose of this Grant was

to provide a reliable and valid testing program for the approval of trade and industrial education teachers. Test development began in earnest on January 15, 1980 with the hiring of a Program Coordinator to work with both the Department of Continuing Education at Fitchburg State College, and the Office of Professional Development, State Department of Education. This Grant is renewed yearly, and a fee structure has been approved to supplement the monies in the Grant.

Figure 1

Requirements for Certification of Vocational Teachers*

(For Trade & Industry Teachers)

	# of States Responding	Mean Requirement	Mass.
Years of Experience Required for Certification	38	3.7	6
Semester Hours Required for Permanent Certification	34	61.8	18
Total Semester Hours to be Competed Prior to First Teaching Assignment	26	52.4	0
Performance Exam Required for Approval	11	--	Yes
Written Exam Required for Approval	12	--	Yes
Fee Required	10	$100	$75

*Abstracted from information contained in Resnick, Harold S. and Gardner, An Analysis of National Certification Requirements and Professional Development Standards for Vocational Educational Personnel, September 1977

Justification for State Competency Testing Program

As of December 1981, in data presented to the American Vocational Association (AVA) at Atlanta, Georgia (see Appendix B), by NOCTI, the following states require examinations prior to certification:

Arkansas
District of Columbia
Georgia
Maryland
Oklahoma
Pennsylvania
Puerto Rico
Rhode Island

Since 12 of the states included in the NOCTI Study did not respond, it cannot be determined if the figures quoted from the Resnick and Gardner study have, in fact, really changed.

Aaron J. Miller (1977), in his report to the AVA Ad Hoc Committee on Professional Standards, indicated that,

> There is a critical need for some mechanism that can be used to certify the occupational and technical competency of vocational teachers. This is especially true for the non-degreed vocational teacher. Variance across states in work experience and inservice teacher education requirements insures that the problem of evaluating work experience persists.

Miller's data indicates the types of vocational competency tests used as part of the Vocational Teacher Certification process.

In another study, Kenneth Simmons (1977) surveyed 54 directors of Vocational Education. Of these, 40 responded and of the 40, 18 used competency examinations for the purposes of certification. Simmons questions were primarily directed toward the use of NOCTI examinations. However, some of his data is of interest in a more general context. Of the 18 directors who responded, half indicated

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more than 5 years of work experience was required for certification (see Figure 2). Only 5 of 18 respondents indicated college credit hours could be substituted for work experience for purposes of certification. Fifteen of the eighteen indicated college credits were required in addition to work experience (see Figure 3). Finally, 13 of the 18 respondents indicated a necessity of regular renewal of teacher certificates. Massachusetts compares with these respondents less atypically than in the Resnick and Gardner study. Massachusetts requires more than 5 years of experience (6 years) as do half of the respondents of this study. Massachusetts requires 18 credit hours addition to work experience for certification. Massachusetts does allow some credit for colleges courses to be counted toward work experience but only if the courses are actually in the field of certification. Finally, Massachusetts requires constant professional development to maintain vocational approval.

At the present time, 18 semester hours credit are required for full approval in Massachusetts. This requirement, indeed, the whole approval process has come under close scrutiny in the recently published report: "Learning the Teaching Trade: A Study of Vocational Teacher Training in Massachusetts," conducted during the Summer and Fall of 1981 and published in the late Fall. Conclusions drawn from this research point to a performance-based curriculum, based on the Ohio State Model, to replace the traditional six courses now required.

Figure 2

NUMBER OF YEARS OF WORK EXPERIENCE REQUIRED FOR VOCATIONAL CERTIFICATION

Years	Frequency*	Percent
3 years	4	22.2
4 years	1	5.6
5 years	4	22.2
More than 5 years	9	50.0
Total	18	100.0

STATES AND TERRITORIES WHICH USED COLLEGE CREDIT HOURS IN LIEU OF WORK EXPERIENCE TOWARD CERTIFICATION

Responses	Frequency*	Percent
Yes	5	27.8
No	12	66.7
No response	1	5.6
Total	18	100.0

*f = Number of states responding

Source, K. L. Simmons, The Status and Trends of Occupational Competency Testing on a National Level with Implications for the State of Mississippi, 1977.

Figure 3

COLLEGE CREDIT HOURS REQUIRED IN ADDITION TO WORK EXPERIENCE TOWARD CERTIFICATION

Responses	Frequency*	Percent
Yes	15	83.3
No	2	11.1
No response	1	5.6
Total	18	100.0

FREQUENCY IN WHICH TEACHERS WERE REQUIRED TO RENEW THEIR TEACHING CERTIFICATES

Years	Frequency*	Percent
Less than 3 years	2	11.1
Every 3 years	2	11.1
Every 4 years	2	11.1
Every 5 years	6	33.3
Above 5 years	1	5.6
No response	5	27.8
Total	18	100.0

*F = Number of states responding

Source, K.L. Simmons, the Status and Trends of Occupational Competency Testing on a National Level with Implications for the State of Mississippi, 1977.

Resnick and Carmody (1977) also identified competency-based teacher education as a national movement. They stated,

> In brief, however, it is based upon the premise that higher quality educational programs can be delivered to students if the teachers are professionally prepared in as precise a manner as possible. This precision is accomplished by first empirically identifying the skills or competencies (in measurable terms) that teachers and other educational personnel need to perform their roles. From these identified competencies, the most appropriate delivery system for teacher training and in-service programs may be established. This movement has been positively and consistently advocated with the field of vocational teacher education. Perhaps vocational teachers have embraced the concept of competency-based teacher education due to the fact that historically, vocational education has been based upon the careful analysis of the critical competencies (or trade analysis) derived from the body of knowledge needed to work in a specific trade or occupation.

T. M. Stinnett (1974) identifies 23 states as having some commitment to competency-based teacher education. Even as this report is being written, leaders in the Division of Occupational Education are convening to determine the best way to fund and ultimately, to deliver competency-based education to the future vocational teachers of the Commonwealth of Massachusetts.

Based on the previous discussion in this paper there are some who would say that Massachusetts is out of step. This author's opinion is that Massachusetts already has a well established competency-based testing component of the approval process and will soon be recognized for being in the forefront of competency-based teacher education.

LEGAL ISSUES SURROUNDING COMPETENCY TESTING

The following discussion is for the purpose of laying a foundation for later activities relative to the Vocational Competency Testing Program in Massachusetts. It is not an exhaustive survey of cases,

nor should it suggest to the committee a knowledge of law. These cases are a few illustrations of what could happen in Massachusetts, and serve to indicate some preventative actions which could be taken.

Courts, formerly reluctant to impose their opinions on professional educators, are increasingly less reluctant to do so. Now courts are more protective of individual rights than societal concerns. Courts serve as a forum wherein education experts establish standards used to make legal decisions. "Courts tend to exercise judicial restraint in administrative matters such as evaluation unless constitutional or other serious issues are alleged. Courts are ill-equipped to determine whether individuals are qualified to practice a profession, relative to the experts-school boards." (R.W. Sealy, Evaluation of Educational Personnel and the Law).

The right of state and local boards of education to set standards of employment has never been disputed by the courts. The possession of a teaching certificate only establishes that the teacher meets minimum standards; local boards are free to impose additional qualifications. (Wardwell v. Board of Education of Cincinnati, 1976, 529 F.2d 625. Also affirmed in Georgia Assn of Educators v. Nix, U.S. v State of North Carolina, Marshall v. Elwell, 1980, among others.)

Court decisions since Griggs v. Duke Power Co.,(1971) uphold the right of the state to use competency testing as a criteria for employment. In remarks before the American Educational Research Association in April 1980, Walter Hathaway gave the following synopsis of the use of testing as a prerequisite for employment.

In June 1978, Florida became the first state to pass legislation requiring applicants for teaching positions to pass a locally developed, comprehensively written exam as a prerequisite for teacher certification. Propsective teachers are also required to pass a nationally normed college entrance exam before being accepted into teacher training programs, which include a years' internship.

Prior to this, Mississippi, North Carolina and South Carolina used National Teacher Examination (NTE) results as a guideline for certification.

In January 1978, the U.S. Supreme Court ruled that South Carolina was not discriminating against blacks by use of the NTE although 83% of black applicants were disqualified by it as against 17.5% of the white applicants.

The Louisiana State Superintendent of Education chose the NTE to meet a legislative requirement that teachers pass a test as a condition of certification.

West Virginia was using the NTE for certification by mid-1979.

Tennessee was to begin using the NTE for certification by the end of 1980.

Alabama will use the NTE unless the State Board of Education develops its own test.

At this time, Florida, Georgia, North Carolina, Arkansas, Virginia, Iowa, Oklahoma have all passed bills requiring the states to develop and administer tests as a condition of teacher certification. (In North Carolina the state test will supplement the NTE.) Arizona, Wisconsin, and New York are considering tests.

In addition to state level exams, Hathaway continued, there are some examples of local district testing.

Pinellas City, Florida schools have been testing teacher applicants since August 1976. There is evidence that the test discourages "dubious" candidates from applying.

Austin, Texas experimented with tests but discarded them in favor of more rigorous competency-based evaluation because of problems with validity, cost effectiveness, and recruiting.

The Dallas, Texas system developed a teacher selection process validation study which used the Wesman Personnel Classification Test of verbal and quantitative ability and standard criteria (grades, references, etc.) plus scores on two essays and ratings on a formal set of interview protocols related to quality of instruction measured by observation and student gain scores on standard tests.

Torrington, Connecticut has used a 200-500 word essay plus spelling and grammar tests in hiring teachers since 1976.

Mobile, Alabama applicants must take the NTE; teachers successfully protested an attempt to make current personnel take the NTE.

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The Prince Georges County, Maryland teachers union worked with school administrators to develop pre-employment tests in spelling, grammar and math, used since June 1975.

The Emporia, Kansas School Board requires applicants to write a letter to demonstrate proficiency in English.

In Montgomery City, Maryland, candidates for English teaching positions must score at least 80 on a college test.

Elementary teachers in Richmond, Virginia had to pass a reading course to get a pay increase.

New York City and Buffalo use the NTE in hiring teachers for schools with many reading problems.

Salem, Oregon requires that applicants pass a locally developed test of competence in spelling, grammar, usage, and the ability to detect errors in written material.

The Civil Rights Act of 1964 provides that any person who, under color of any statute, regulation, or custom, deprives another of any rights, privileges, or immunities secured by the Constitution and laws is liable to legal action for redress. The action complained of must be taken by public officials. (Numerous courts have decided that public school districts and boards of education qualify.) Such rights include a liberty interest - an individual's right to freely practice the profession of his choice -- of which he can be deprived by, for instance, being fired without due process under conditions which place a stigma on his reputation, adversely affecting his future employment opportunities. A property interest may be acquired in a job where an individual's employer creates a "reasonable expectation of reemployment." The individual's right here is protected, again, by the due process clause. Property interest is sometimes claimed by probationary or untenured teachers. The right to due process of law is guaranteed in the 14th Amendment. A legally valid personnel evaluation system and practices tend to be characterized as fundamentally fair, objective,

applied evenhandedly, and providing adequate notice of employer expectations. Arbitrary and unreasonable conditions of employment are regarded by the courts as violating the spirit of due process. In English v. North East Board of Education, a Pennsylvania district court held that where state action denies a person license or opportunity to practice a chosen profession, due process requires notice, a hearing, and a chance to respond to the charges against him (1974, 385 F Supp 1174).

The 14th Amendment also guarantees equal protection of laws to all. A number of statutes protect the individual against discrimination on account of handicaps, age, sex, or race. This has been the most active area for employment testing litigation, and the one where the most development has taken place in recent years. The Civil Rights Act of 1866 prohibits racial discrimination in making contracts, including contracts for employment, and provides that all have the same rights to protection of person and property. Title VII of the Civil Rights Act of 1964:

(1) Makes it unlawful for an employer to limit, segregate, or classify employees and deprive them of employment or status due to race, color, religion, sex, or national origin.

(2) Authorizes the use of any professionally developed ability test not designed, intended, or used to discriminate.

(3) Prohibits discriminatory employment practicies in hiring, firing, classifying, promoting, or referring individuals for employment.

In Griggs (1971), the Supreme Court held that, under this Act, practices or tests that are neutral on their face and neutral in intent are not allowable if they act to "freeze" certain employees in

discriminatory positions, whether or not the employer intended to discriminate. Professional development of tests need not mean development by psychologists or ETS; Broussard decision held that job-related tests devised by a company's supervisors are acceptable.

Teachers on Waivers

Massachusetts is on firm ground in the development and administration of its own vocational competency testing program. However, questions certainly will be raised relative to the "Property interest" described above by the increasing number of individuals who have been teaching on a waiver prior to taking the test. In Massachusetts, a school committee may hire a person who is qualified, but not approved, if they can demonstrate that an equally qualified and approved person is not available. It is the superintendents responsibility to apply to the Office of Professional Development for a waiver. This waiver is given for one year only, and at the discretion of the Office of Professional Development. Since the advent of Proposition 2 1/2, it has become more and more the rule than the exception for the individual who fails the Vocational Competency Test to be denied employment for a second year by the local school committee on the basis that the individual is not approved.

Federal Guidelines

Acceptable forms of employment testing were further delineated by the Equal Employment Opportunity Commission Guidelines on Employee Selection Procedures (1966, revised 1974). The Guidelines established that acceptable tests must be demonstrably job-related. Tests can be

validated by one of three methods: criterion, construct, or content. Courts have consistently demanded that employment tests meet EEOC guidelines where the tests have been shown to have a differential racial impact. Some cases which have a bearing on employment testing are included here.

In Albermarle Paper Co. v. Moody (1975), workers brought a class action suit against the company on employment testing and other issues relating to claimed violation of Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972.

Albermarle required applicants for training in skilled jobs to take the Revised Beta Exam of nonverbal intelligence and the Wonderlic Personnel Test of verbal facility, using the national norm as the cut-off point. Plaintiffs showed that significantly fewer black applicants than white made the require scores.

Findings for the defendents in district courts were reversed on appeal. The appeals court found that a hastily-commissioned validation study by an industrial psychologist was inadequate because it was subjective, using faulty sampling techniques, and didn't test all the jobs involved.

Determining Predictive Validity

In its decision, the Supreme Court held that discriminatory tests are impermissible unless shown, by "professionally acceptable methods" (here citing the American Psychological Assn. Standards for Educational and Psychological Tests and Manuals) to be predictive of, or correlated with important elements of work behavior related to the job applied for. The court endorsed EEOC guidleines for testing.

Because the company had been making changes in its testing procedures, the Supreme Court vacated the judgment of the court of appeals and remanded the case to the district court, holding that the testing program had not proven job-related according to EEOC guidelines.

In Washington v. Davis (1976), two black police applicants brought a class action suit against the Commissioner of the District of Columbia, the chief of police, and the Commissioner of the U.S. Civil Service. Plaintiffs questioned the validity of a written personnel test used to ascertain the level of verbal skill of police recruits. They alleged discrimination because the test disqualified disprportionate numbers of blacks, and claimed that the test bore no relationship to job performance. The test, they claimed, denied their right to due process under the 5th Amendment (which says, in part, that "No person... shall be deprived of life, liberty, or property, without due process of law") and D.C. statute.

District Court held for the defendents; the appeals court reversed, citing Griggs: the test did have a differential racial impact, and it had not been validated in terms of job performance.

The Supreme Court reversed the court of appeals, holding that: the positive relationship that existed between the test and success in the training program was sufficient to validate the test; the test was neutral on its face; a law or act is not necessarily unconstitutional solely because it has a racially disproportionate impact; the government has a right to seek to upgrade the abilities of its employees.

A dissenting opinion by two of the justices held that predictive validity regarding job success was not established, nor was it proven by the Civil Service Commission that the test measured job-related skills.

Cases Relating to Education

South Carolina has used NTE scores in determining candidate fitness for teacher certification for more than 30 years. In 1969, the certification system was revised; candidates were required to score at least 975 to obtain a "professional certificate," and 850 to obtain a "warrant certificate." Under this system, for the first time, significantly more blacks than whites were denied certificates. In 1976, the requirements for certification were again revised. Separate minimum scores were required in each of 18 fields of teaching specialty. In U.S. v. South Carolina, 1977, Plaintiffs claimed that the use of the test was discriminatory, and that the 1976 revisions would act even more strongly against black candidates.

The Educational Testing Service (ETS), developers of the NTE, had themselves warned the state that the system instituted in 1969 constituted a misuse of the test. ETS urged validation of the 1963 cut-off scores, and, in 1975 a joint validation study was undertaken by ETS and the South Carolina public school system. As a result, 18 fields of teaching specialties were identified, and appropriate minimum test scores validated for each.

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The court accepted the content validity of the NTE as used since 1976 for certification, saying that "the NTE do not measure teaching skills, but do measure the content of the academic preparation of prospective teachers."

The decision further held that "the state has the right to adopt academic requirements and use written achievement tests designed and validated to disclose the minimum amount of knowledge necessary to effective teaching."

Other recent cases, serving to substantiate the previous arguments are

- Blake v. City of Los Angeles (1979). In this decision, the court succinctly stated what has come to be the position of many courts on employment testing since Griggs; a test is discriminatory if its results affect minorities differently. Job relatedness and predictive validity of job success of the test must be shown so that "the discriminatory employment practice is necessary to safe and efficient job performance" and therefore allowable as a business necessity, although discriminatory.
- Firefighters Institute for Racial Equality v. City of St. Louis, Missouri (1978, 588 F 2d 235). In this decision, the court held that "the use of a testing device, although neutral on its face, which has a racially disparate impact on members of minority groups and which has not been properly validated by the employer constitutes a discriminatory act for which Title VII affords a remedy." The court also declared that constructing a content valid employment test first requires a thorough analysis of the job to be performed.

- Harless v. Duck (1980, 619 F 2d 611). In this decision, a court of appeals quoted the American Psychological Assn. Standards as used in the EEOC guidelines in stating that a public employer may validate an employment test in any of three ways: by establishing criterion, construct, or content validity.
- United States v. Commonwealth of Virginia (1980, 620 2d 1018). Here the appeals court ruled that, although a written test for a state trooper position was a valid predictor of performance in training school and not deliberately discriminatory, it was not shown to be a valid predictor of job performance, and had an adverse impace on black applicants. Therefore, the employer was required to revise the test along EEOC guidelines.
- Guardians Assn. v. Civil Service Commission, City of New York (1980, 484 F Supp 785). District Court ruled that the proof of content validity offered for an examination used to provide an eligibility list of appointees to the NYPD was inappropriate, as the exam involved abilities which the employee would expect to learn on the job, and the content validation model can be used only when the test corresponds closely to tasks performed on the job. Without predictive validity of job performance, ranking for appointments is not insurance of competence nor rebuttal of a charge of discrimination.

Overtly these cases are all about discrimination--the claim of discrimination must be successfully raised in order to invoke Title VII and the EEOC guidelines (see Appendix C)--and the most dramatic development in that area occurred in the Griggs decision of 1971, where the Supreme Court held that a requirement for employment is discriminatory if it has a disparate racial impact, whatever the intent of the employer. Courts since then have mostly held to that interpretation, and have been eager to strike down discriminatory testing, despite what might be seen as the more conservative Washington decision of 1976, where the court held that an act is not necessarily unconstitutional solely because it has a racially disproportionate impact.

Definition of Teaching

For education, however, the real issue that emerges here is how to define teaching. The courts have moved from demanding, vaguely, that tests be "demonstrably job-related" to quite specifically demanding the EEOC validation guidelines be met. Further, the courts seem to be most comfortable with tests that predict job performance. Indeed, several recent decisions are worded as if predictive validity is the only acceptable mode. It seems likely that in order to validate employment tests to the courts' satisfaction, educators will have to define "teacher" in terms of what a successful teacher does, and those terms will have to be measurable by testing.

Massachusetts Implications

Implications for the Massachusetts Vocational Competency Testing Program are clear in both the areas of discrimination and the area of due process. The appeals procedure, described in detail in the User's Manual for Massachusetts Vocational Competency Testing Program, clearly guarantees due process to any candidate who avails him/herself of the procedure. However, in the area of discrimination some further research must be done. The "4/5 rule" from the EEOC guidelines should be applied to the data of the last three years, and appropriate measures undertaken, if shown to be necessary. Two programs dedicated to the recruitment of minorities and limited English speaking persons into the ranks of vocational teachers are funded and operating. It should be demonstrated that those persons addressed by the recruitment programs are not discriminated against by the Vocational Competency Testing Program.

Summary

Finally, the cases cited previously, (Blake v. City of Los Angeles, 1979; Firefighters Institute for Racial Equality v. City of St. Louis, MO, 1978; Harless v. Duck, 1980; U.S. v. Commonwealth of Virginia, 1980; and Guardians Association v. Civil Service Commission, City of New York, 1980) reinforce the notion that employment tests be demonstrably job-related. Further, the courts seem to be most comfortable with tests that predict job performance. Indeed, many of the above decisions are worded as if predictive validity is the only acceptable mode. It seems likely that in order to validate tests such as competency tests which are required for approval to teach, to the court's satisfaction, educators will have to define what skills a vocational teacher needs, and those skills will have to be measurable by testing.

All of these decisions seem to lend credence to this author's position that:

- Massachusetts has the right to require a competency test as a prerequisite to employment as a vocational teacher;
- These competency tests are prepared by practicing professionals in the field to insure content validity;
- These tests are job-related because they reflect the goals and objectives of the courses of study presently in place in the Commonwealth;
- Predictive validity should be established by a follow-up study of successful test-takers who subsequently acquired a teaching position in the Chapter 74 funded schools of Massachusetts;
- The "4/5 Rule" should be applied to determine whether or not discrimination exists.

Conclusions

Competency Testing as a Requirement for Approval

The fact that Massachusetts has the right to require a competency test as a prerequisite for Vocational Teacher Approval has been well supported through the numerous court decisions cited previously in this paper. Decisions based on the 14th Amendment starting with Griggs and continuing to the present affirm the authorization of any professionally developed ability testing as a prerequisite to employment. The "professionally acceptable methods" of validating tests, cited in Albemarle refer to the American Psychological Association Standards for Educational and Psychological Tests and Manuals.

Development of User's Manual

The Vocational Competency Testing Program in Massachusetts has recently developed a User's Manual based on the standards in the American Psychological Association's publication. This Manual delineates the procedures now in place and projected for the future which follow APA Guidelines, especially with regards to validating the tests, and assuring due process.

Validition Studies

Content validity. The content validity of the Massachusetts Vocational Competency Testing Program is assured by the composition of the Test Development Committees described in the Manual, and the process of developing new tests, and reviewing existing tests. The questions of content validity could be further assured by a simple study carried out which would involve "third party review" of these test by practicing professionals in the field. Persons who are not directly involved in the development or administration of the tests would contribute immeasurably to the validation of these tests.

Concurrent validity. The concurrent validity could be established by a study which would involve the use of the NOCTI examinations and the Massachusetts examinations in a parallel test administration study. This is under discussion at the present, and may soon be authorized by the Test Review Board.

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Predictive validity. The predictive validity could be established by an extensive study of successful test-takers, and their relative success in the classroom. This study is highly recommended by this author, and is intended to be the subject of later work.

Construct validity. The construct validity is not appropriate for this particular program, since no theoretical concepts or traits are being measured. This testing program deals exclusively with skills and not abstractions.

Job Relatedness

The process of developing the new tests in this program and reviewing existing tests for revision described in the User's Manual clearly establishes the job-relatedness (sometimes referred as criterion validity) required in numerous court decisions. Existing programs are surveyed by the test committees for objectives and content, and new tests are constructed to reflect these goals and content. In addition, since industry representatives serve on all test committees, the tests reflect what "should be" as well as "what is" in the regional vocational schools in Massachusetts.

Discrimination

The User's Manual describes the Appeals Process which guarantees due process for any test-taker in the Massachusetts program. However, no steps have been taken at the present time to assure that minority and bilingual candidates have not been discriminated against. These

test-takers are already enrolled in Federally funded programs to provide support services during the entire approval process. However, if these candidates cannot successfully survive the Vocational Competency Test, they cannot become approved vocational teachers. More work needs to be done in this area. Specifically, the "4/5 Rule" needs to be applied to the results of the past two years of testing to determine if discrimination, in reality, does exist. If so, then appropriate steps should be taken to correct the situation. Time and time again, court decisions have been handed down in all parts of the country which indicate that employment testing should be predictive of job performance for all people.

Marching to a Different Drummer

Frequently, when a person or a segment of society is "marching to a different drummer," they are thought to be "out of step." In Massachusetts, we are thought to be "out of step" by many persons, including researchers such as Resnick, Carmody, and Miller. However, it is hoped by this author that it has been sufficiently demonstrated that although Massachusetts may be bent on "doing its own thing," this state is not out of step, but a step ahead of her own time. It is hoped that our critics will come to respect Massachusetts for setting the pace for the years to come. It is hoped that our commitment to competency-based education of vocational teachers, and hence, competency-based teacher approval, will provide a model for other states to follow.

B I B L I O G R A P H Y

Albemarle Paper Co. v. Moody (1975, 422 US 405, 45 L Ed 2d 280, 95 S Ct 2362)

Blake v. City of Los Angeles (1976)

Chalupsky, A. B.; Phillips-Jones, L.; Danoff, M. N.; Competency Measurement in Vocational Education: A Review of the State of Art, Palo Alto, CA: American Institute for Research, June 1981.

Chapter 74 Regulations, Laws of Massachusetts, Massachusetts Department of Education, 1977.

Firefighters Institute for Racial Equality v. City of St. Louis, Missouri (1978, 588 F ed 235)

Guardians Assn. v. Civil Service Commission, City of New York (1980) (484 F Supp 785)

Harless v. Duck (1980, 619 F ed 611)

Hathaway, W. E., "Testing teachers to ensure competency; the state of the art." Paper given at the annual meeting of the American Educational Research Association, Boston, April 1980.

Johnson, H.C. Jr., "Court, craft and competence: a reexamination of 'teacher evaluation' procedures." Phi Delta Kappan 57 (May 1976) pp. 606-610.

Kazanas, C. and Kieft, D. An Experimental Project to Determine more Effective Vocational Teacher Certification Procedures in Michigan by Competency Examinations. Bethesda, MD: ERIC Document Reproduction Services, 1966.

Lareau, E. H., Learning the Teaching Trade; a study of Vocational Teacher training in Massachusetts.

McMahon, G. "The Growing Importance of Occupational Competency Testing." American Vocational Journal 46 (May 1971), p. 46.

Miller, J. and Roehrich, R. The Certification of Vocational Education Personnel. A report of the AVA Ad Hoc Committee on Professional Standards. Washington, D.C.: American Vocational Assocation, 1977.

Handbook for Area Test Center Organization & Administration, Albany, New York: National Occupational Competency Testing Institute.

Oppenheim, A.N. Questionnaire Design & Attitude Measurement, New York: Basic Books, Inc. Publishers, 1966.

Resnick, H. S. and Carmody, S. N. Analysis and Systhesis of Competenct Needed by Vocational and Career Educators; Phase I of a Professional Development Study for Massachusetts. Boston University School of Education, January 1977, 358 pp.

Resnick, H. and Gardner, S. An Analysis of National Certification Requirements and Professional Development Standards for Vocational Education Personnel. Phase II of a Professional Development Study for Massachusetts, vol. III, Boston University School of Education, September 1977.

Simmons. K. L. The Status and Trends of Occupational Competency Testing on a National Level with Implications for the State of Mississippi. Dissertation. Mississippi State University, 1977.

Tractenberg, L. Legal Issues in Testing of School Personnel. Phi Delta Kappan, May 1976, (vol. 57), pp. 602-605.

U.S. v. Commonwealth of Virginia (1980, 620 F ed 1018)

U.S. v. State of South Carolina (1977, 445 F Supp 1094, decision affirmed by Supreme Court in National Education Assn. v. South Carolina, 98 s Ct 756, 434 US 1026, 54 L Ed 2d 775).

Vandermeer, A. W. Legislatures, the courts, and teacher education. School Review, vol. 82 (February 1974), pp. 281-299.

Washington v. Davis (1976, 426 US 229, 48 L Ed 2d 597, 96 S Ct 2040)

Wiersma, W. Research Methods in Education -- An Introduction. 2nd ed. Ithaca, Illinois, F. E. Peacock Publishers, Inc., 1976.

APPENDIX A

ABSTRACT FROM A MANUAL ON STANDARDS AFFECTING SCHOOL PERSONNEL IN THE U.S.

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ABSTRACT FROM A MANUAL ON STANDARDS AFFECTING SCHOOL PERSONNEL IN THE U.S.

ALABAMA: Type III Day Trade. Valid for 4 yrs; renewable on experience. Req: H.S. grad plus 7 yrs experience in trade, or graduate of approved trade school or h.s. program plus 3 yrs experience.

Type II certificate issued on 12 semester hrs in trade and industrial ed. Type I issued on additional 30 semester hrs in general and professional ed, with 6-9 in English, 6-9 in history, remainder in electives in specified areas. Nonprofessional certificate, with endorsement in trades (valid 1 yr) requires bachelor's plus 3 yrs experience.

ALASKA: Vocational trades and industry, Type D. Valid 2 yrs. Endorsed for secondary trade/vocational areas. Req: 4 or more yrs experience and statement of employment or intent to employ from school district.

ARIZONA: Secondary, vocational subjects. Valid 6 yrs; renew on 5 semester hours or continuous teaching. Req: bachelor's with 18 hrs in professional ed. Field of concentration: agriculture, 60; home economics, 40; business, distributive ed, trade and industrial ed, see Arizona State Plan for Vocational Education.

CALIFORNIA: Standard designated subjects (inc vocational trade and tech). Initially valid 2 yrs. Appropriate practical experience and college preparation.

COLORADO: Vocational teacher, Type C. Endorsed for certain vocational/industrial area. Valid 5 yrs. Req: 5 or more yrs experience, statement of employment or intention to employ from school district.

CONNECTICUT: Vocational Education. Provisional certificate valid 5 yrs, renewable on experience. Req: based on combination of experience (8 yrs for trade instructor, 3 yrs for related instructor) and education (h.s. plus basic instructor training for trade instructor, 2 yrs college, inc 30 hrs tech subjects, plus basic instructor training, for related instructor).

Secondary certificate valid for endorsed subjects in voc-tech schools.

DELAWARE: Industrial education. H.S. plus 2 yrs experience, 48 hrs training in teaching vocational ed, 12 hrs academic subjects. Initial certificate valid 10 yrs, renew to professional certificate (valid 5 yrs) on completion of 3 yrs teaching.

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Division of Occupational Education

The Commonwealth of Massachusetts
Department of Education

31 St. James Avenue, Boston, Massachusetts 02116

MEMORANDUM

TO: Vocational Teacher Training Candidates

FROM: John P. McDonagh
Vocational Personnel Development Coordinator

SUBJECT: Undergraduate Vocational Teacher Training Program

DATE: April 2, 1979

Upon successful completion of the vocational competency testing, candidates are issued provisional approval. In order to attain full approval, candidates must successfully complete 18 credits from the following list of courses, within three years of the date of provisional approval, as follows:

Part I

Foundations of Occupational Education - 6 credits

This course is required for all candidates.

Part II

The remaining 12 credits are to be selected from the following list of 3 credit courses:

1. Occupational Information
2. Laws Relating to Occupational Education
3. Supervision and Administration of Vocational Education
4. Educational Tests and Measurements
5. General, Educational or Adolescent Psychology

Candidates must submit transcripts or courses completed in order to receive a full approval card. Responsibility for submitting proof of courses completed lies with the applicant and not the college or Division of Occupational Education.

Candidates should contact the following offices for information about these courses:

Fitchburg State College	Dr. Lawrence Ovian	345-2343
Westfield State College	Prof. Lawrence LaTour	568-3311 (X 327)
Boston State College	Continuing Education	731-3300
Mass. Maritime Academy (Foundations Only)	Mr. Philip Sanford	759-5761

APPENDIX B

SURVEY OF NECESSITY OF OCCUPATIONAL EXAMINATIONS FOR CERTIFICATION AND UNIVERSITIES GRANTING CREDIT FOR SUCCESSFUL PASSING OF NOCTI TOCT EXAMINATION

APPENDIX B

SURVEY OF NECESSITY OF OCCUPATIONAL EXAMINATIONS FOR CERTIFICATION
AND UNIVERSITIES GRANTING CREDIT FOR SUCCESSFUL PASSING OF NOCTI TOCT EXAMINATIONS

	OCCUP. EXAM NECESSARY FOR CERTIFICATION?		UNIVERSITY GRANTING CREDIT	AMOUNT OF CREDIT
	Yes	No		
Alabama		X		
Alaska				
Arizona				
Arkansas	X		University of Arkansas	
California		X	None	
Colorado (Not surveyed)				
Connecticut		X	Central Ct. State College	
Delaware		X	Delaware State College	
District of Columbia	X		University of D.C.	22 Sem. Hrs.
Florida		X	Florida A & M	30 Sem. Hrs.
			Florida International Univ.	30 Sem. Hrs.
			University of Central Florida	30 Sem. Hrs.
			University of Northern Fla.	30 Sem. Hrs.
			University of Southern Fla.	30 Sem. Hrs.
			University of Western Florida	30 Sem. Hrs.
Georgia	X		University of Georgia	25 Quarter Hrs.
			Georgia State University	25 Quarter Hrs
			Georgia Southern College	25 Quarter Hrs
			Valdosta State College	25 Quarter Hrs.
			Armstrong/Savannah State Col.	25 Quarter Hrs.
Hawaii		X	University of Hawaii	40 Sem. Hrs.
Idaho		X	University of Idaho	45 Credits
			Idaho State University	50 Credits
Illinois				
Indiana		X	Purdue	32 Sem. Hrs.
			Ball State University	
			Indiana State University	
Iowa		X	Iowa State University	30 Sem. Hrs.
Kansas (Not surveyed)				
Kentucky		X	Murray State University	9 Hours
			Morehead State University	9 Hours
			Northern Kentucky University	18 Hours
			Eastern Kentucky University	18 Hours
			Western Kentucky University	18 Hours
			University of Louisville	18 Hours
			University of Kentucky	18 Hours

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	OCCUP. EXAM NECESSARY FOR CERTIFICATION?		UNIVERSITY GRANTING CREDIT	AMOUNT OF CREDIT
	Yes	No		
Louisiana		X	None	
Maine		X	University of Southern Maine	10 Hours
Maryland	X*	X**	None	
Massachusetts				
Michigan		X	Central Michigan University	20 Hours
			Eastern Michigan University	24 - 36 Hours
			Ferris State College	60 Hours
			Siena College	30 Hours
			University of Michigan-Flint	30 Hours
			Wayne State University	30 Hours
			Western Michigan University	20 Hours
			Northern Michigan University	24 Hours
			Madonna College	24 Hours
Minnesota		X	University of Minn. - Duluth	45 Quarter Hours
Mississippi		X	Mississippi State University	
Missouri		X	None	
Montana		X		
Nebraska		X	Wayne State College	Variable
			Kearney State College	Variable
			Chadron State College	Variable
			University of Nebraska	Variable
Nevada		X	None	
New Hampshire				
New Jersey		X	Rutgers	18 Hours
			Glassboro	
			Trenton State	
New Mexico				
New York		X	State University Coll.-Buffalo	30 Sem. Hrs.
			City College of New York	16 - 32 Sem. Hrs.
			Dowling College - Oakland, L.I.	30 Sem. Hrs.
			New York University	38 Sem. Hrs.
North Carolina (Not surveyed)				
North Dakota		X	None	
Ohio				
Oklahoma	X		Oklahoma State University	24 Hours
			Central State University	15 Hours
Oregon		X	None	
Pennsylvania	X		Temple University	
			Pennsylvania State University	
			Indiana University of Penn.	
			University of Pittsburgh	

*For Degree Completion
**For Initial Certification

	OCCUP. EXAM NECESSARY FOR CERTIFICATION?		UNIVERSITY GRANTING CREDIT	AMOUNT OF CREDIT
	Yes	No		
Puerto Rico	X		None	
Rhode Island	X		Rhode Island College	
South Carolina (Not surveyed)				
South Dakota		X	University of S.D.-Springfield	32 - 48 Credits
Tennessee		X	Middle Tenn. State University	18 Sem. Hrs.
Texas		X	None	
Utah		X	Utah State University	18 Quarter Hrs.
Vermont		X	University of Vt.-Montpelier	30 Sem. Hrs.
Virgin Islands		X	None	
Virginia		X	Virginia Polytechnic Inst. Old Dominion University	
Washington (Not surveyed)				
West Virginia		X	W. Va. Institute of Technology	30 Sem. Hrs.
Wisconsin		X	University of Wisconsin	
Wyoming				

Number surveyed: 48
Number responded: 40

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APPENDIX C

UNIFORM GUIDELINES ON EMPLOYEE SELECTION (ABSTRACT FROM FEDERAL LEGISLATION)

APPENDIX C

UNIFORM GUIDELINES ON EMPLOYEE SELECTION
(ABSTRACT FROM FEDERAL LEGISLATION)

General principles:

1. Relationship between validation and elimination of adverse impact, and affirmative action. EEOC law doesn't require validation if no adverse impact; test user can comply by providing evidence of validity (or other legal justification), or by eliminating adverse impact.

2. "Bottom line" -- if overall selection process has no adverse impact, government will not usually examine individual components of the process for adverse impact or validity.

3. Investigation of alternatives selection procedures and methods of use is enjoined.

4. Cutoff scores are less likely to have adverse impact than rank ordering.

5. Scope: requests for exemptions for certain classes of users (academic institutions, large public employers, apprenticeship councils, licensing and certification boards) denied.

6. "4/5 Rule of Thumb" appropriate in defining adverse impact. Selection rate for any race, sex, or ethnic group of less than 4/5 the rate of selection for the group with the highest rate is evidence of adverse impact.

Technical standards for validity studies (Section 14):

A. Should be based on a review of information about the job.

B. Standards for criterion-related validity studies:

1. Technically feasible?

2. Job analysis leading to identification of important job duties and behaviors.

3. Criterion measures should represent important work work behavior or outcomes. Some criteria may be used without full job analysis if user can show importance to job (production rate, absenteeism, length of service). Standardized rating of overall work performance may be acceptable. Performance in training may be used if

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success in training is properly measured and the relevance of training to the job is established. Measures consisting of paper and pencil tests will be closely reviewed for job relevence.

4. Sample subjects should be representative.

5. Statistical relationship between scores and criterion measures is statistically significant at 0.05 level of significance.

6. Appropriateness of selection procedure: the greater the coorelation coefficient between performance on a selection procedure and one or more criteria of performance on the job, and the greater the importance and number of aspects of job performance covered by the criteria, the more likely it is to be appropriate.

7. Avoid overstatement of validity findings, i.e., from using few criteria when many have been studied, or by use of optimal statistical weights. Safeguard by using a large sample and cross-validating.

8. Fairness: where one group characteristically scores lower, and the difference in scores is not reflected in differences in a measure of job performance, the use of the selection procedure may unfairly deny opportunities to the lower-scoring group. Employer may have to investigate for bias.

C. Technical standards for content validity studies:

1. Appropriateness: a selection procedure can be supported by content validity strategy to the extent that it is a representative sample of job content. Selection procedure based on inferences about mental processes cannot be supported soley or primarily on the basis of content validity, nor can one involving knowledge or skills which an employee is expected to learn on the job.

2. Job analysis.

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3. Selection procedure may be developed from job analysis, been previously developed by the user, or by other users or test publisher.
4. Standards for demonstrating content validity: user should show that behaviors demonstrated are a representative sample of behaviors of the job. The closer the content and context of the selection procedure are to work outputs or behaviors, the stronger is the basis for content validity. Where knowledge is measured, it should be operationally defined as that body of learned information used in, and a prerequisite for, observable aspects of work behavior of the job. Where skills or abilities are measured, they should be operationally defined in terms of observable aspects of work behavior of the job, used in and necessary to performance of important work behavior.
5. Appropriate statistical estimates of reliability should be made whenever feasible.
6. Prior training or experience: a requirement for, or evaluation of these factors should be justified on the basis of a relationship between their content and the content of the job.
7. Content validity of training success -- as above.
8. Selection procedure supported by content validity may be used if it represents important work behavior.
9. Ranking based on content validity studies: if user can show, by job analysis or otherwise, that a higher score on a content valid selection procedure is likely to result in better job performance, results may be used to rank candidates. Selection procedure should measure aspects of performance which differentiate among levels of job performance.

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D. Technical standards for construct validity studies

1. Appropriatesness? Tricky, complex, lack hard data.

2. Job analysis should show work behaviors required for successful performance of job and identify the underlying constructs.

3. Selection procedure should be developed or identified which measures construct developed. Relationship between construct as measured by selection procedure and related work behavior(s) should be supported by empirical evidence from one or more criterion-related studies of the job.

4. Use of construct-validity study without new criterion-related evidence may be acceptable if the selection procedure was used elsewhere and validated by a criterion study, where work behavior(s) and work products the same.

Documentation of impact and validity evidence (Section 15)

A. Documentation of impact and validity evidence:

1. Users (except those excused, i.e., those with less than 100 employees) must keep information on adverse impact of selection procedure, and, where adverse impact exists, keep evidence of validity of the procedure.

2. Adverse impact determinations should be made at least annually for each group that makes up at least 2% of the work force in the area, using the 4/5 rule. Where adverse impact exists, user must show which components of the selection procedure have adverse impact. User must continue to collect this information for at least 2 years after adverse impact is eliminated. If user makes too few selections to determine adverse impact, user should continue to collect data until the determination can be made.

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3. Documentation of validity evidence: Where selection procedure has adverse impact, user must keep one or more of the following types of evidence for each component of the procedure which had adverse impact:

(i) Evidence of criterion-related validity.

(ii) Evidence of content validity.

(iii) Evidence of construct validity.

(iv) Evidence from other studies showing the validity of the selection procedure in the user's facility.

(v) Evidence showing why validity study cannot or need not be performed and why continued use of the procedure is legal.

B. Evidence should be organized and complete, and include:

1. For criterion-related validity studies:

(i) User(s), location(s), and date(s) of study.

(ii) Problem and setting.

(iii) Job analysis or review of job information.

(iv) Job titles and codes.

(v) Criterion measures (basis for selection of).

(vi) Sample description.

(vii) Description of selection procedures.

(viii) Techniques and results.

(ix) Alternative procedures investigated.

(x) Uses and applications of selection procedures.

(xi) Source data.

(xii) Contact person.

(xiii) Steps taken to assure accuracy and completeness.

2. For content validity studies:

(i) User(s), location(s), and date(s) of study.

(ii) Problem and setting.

(iii) Job analysis -- content of job.

(iv) Selection procedure and its content.

(v) Relationship between selection procedure and job.
(vi) Alternative procedures investigated.
(vii) Uses and applications of selection procedure.
(viii) Contact person.
(ix) Accuracy and completeness.

3. For construct validity studies:
(i) User(s), locations, and date(s) of study.
(ii) Problem and setting.
(iii) Construct definition.
(iv) Job analysis (including method of analysis used).
(v) Job titles and codes.
(vi) Selection procedure used as a measure of the construct.
(vii) Relationship to job performance of the construct.
(viii) Alternative procedures investigated.
(ix) Uses and applications.
(x) Accuracy and completeness.
(xi) Source data.
(xii) Contact person.

4. For evidence of validity from other studies:
(i) All applicable factors from above, plus:
(ii) Criterion-related evidence that important work behaviors are the same.
(iii) Description of basis on which criteria used in original study determined to be relevent to present job.
(iv) Other variables'(sample characteristics, racial/ethnic composition of labor force, etc.) similarity to conditions of original study.
(v) Show use of selection procedure to be same.
(vi) Provide bibliography of reports of validity.
(vii) Evidence from content and construct validity studies as above.

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5. For evidence of validity from cooperative studies -- as above.
6. For interim use of selection procedures:
   (i) Should be supported by substantial evidence of validity.
   (ii) Report prepared, giving date estimated to complete gathering additional evidence for validity study, and description of data to be collected.

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APPENDIX D

VOCATIONAL INSTRUCTOR APPROVAL REQUIREMENTS: PROVISIONAL STATUS

APPENDIX D

VOCATIONAL INSTRUCTOR APPROVAL REQUIREMENTS: PROVISIONAL STATUS

	EXPERIENCE	EDUCATION	LICENSURE	MISCELLANEO
TRADE AND INDUSTRY	Six (6) years of recent, full-time experience Bachelor's Degree in a specific field = 3 years Master's Degree in a specific field = 1 year	High School (Diploma or Massachusetts G.E.D.)	Aircraft Maintenance Cosmetology Electrical Plumbing & Pipefitting Radio & T.V. Repair Steam Engineering	Competency Testing
HEALTH OCCUPATIONS	Three (3) years of recent, full-time experience (clinical) Master's Degree in a specific field = 1 year	Bachelor's Degree (Exceptions: Dental Hygienist Dental Assistant)	Appropriate State or National license or registration	
AGRIBUSINESS	Three (3) years of recent, full-time experience Master's Degree in a specific field = 1 year	Bachelor's Degree with specific credits related to subject (Exception: Agricultural Mechanics)		
CONSUMER AND HOMEMAKING	Three (3) years of recent, full-time experience Master's Degree in a specific field = 1 year	Bachelor's Degree minimum of twelve (12) credits in a specific area (e.g. Child Care)		
DISTRIBUTIVE EDUCATION	Three (3) years of recent, full-time experience Master's Degree in a specific field = 1 year	Bachelor's Degree minimum of eighteen (18) credits related to distributive education		

Candidates are required to complete an eighteen (18) credit teacher training program within a three (3) year period in order to receive full approval.

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DISTRICT OF COLUMBIA: 2 yr license becomes permanent certified on satisfactory job performance. Certificate valid 5 yrs, re on 6 hrs appropriate course work.

Trade and industrial occupations and related subjects. Req: bachelor's in ed, or bachelor's which inc wage-earning experience in trade; 3 yrs experience; courses in ed principls 6 hrs in voc ed; practice teaching or 1 yr experience. Wage-earning experience may substitute on yr-for-yr basis for college requirements.

GEORGIA: Req bachelor's plus requirements for teaching field for provisional certification (valid 4 yrs, not renewable). Req bachelor's with 40 hrs in general ed (English, science, major) 18 in professional ed, plus requirements for teaching field for professional 4-yr certificate (valid 7 yrs, renew on 2 additional courses). Master's with 6 hrs in ed, 15 hrs in field required for continued certification. Voc ed field requirement may be satisfied by completion of approved program and recommendation of preparing institution.

ILLINOIS: Provisional Vocational Certificate. Based on appropriate training or experience as specified by state certification board.

INDIANA: Certification required for voc trade school teachers Valid 5 yrs. Provisional secondary convertible to professional certifiaction with master's and 3 yrs teaching experience. Req; bachelor's with 50 hrs general ed, 18 professional ed, 40-52 hrs in major field.

KENTUCKY: Vocational Education (10-yr). Req: 4 yrs teaching experience in approved program and 24 hrs in professional course (or 18 hrs if graduate of approved associate or bachelor's degree program).

Vocational Education (1-yr). Req: 3 yrs successful and appropriate occupational experience in teaching area. First renewal requires 6 hrs in approved curriculum; subsequent rene require 4 hrs in approved associate or bachelor's degree progr

LOUISIANA: Trade and Industrial Certificate. Special certifi valid for limited period, subject to renewal, based initially trade or industrial experience.

MAINE: Vocational Trade and Industrial Teacher, Special Certi cate. Valid 2 yrs. Req: H.S. or equivilent; industry experi (apprenticeship; or 3 yrs experience; or 60 hrs in ed, inc 20 related tech or science subjects; or graduation from appropria 2-yr voc/tech instructional program); 3 yrs experience at journeyman level; completion of short training program at discreti of Commission of Education.

5-yr certificate requires completion of 12-hr approved program of teacher-training courses and 4 yrs experience under 2-yr certificate.

MARYLAND: Vocational Education Subjects (inc trades and indus For required courses and minimum hrs see State Plan for Vocati Education, Department of Education.

MINNESOTA: Secondary (Vocational). Valid for teachers of endorsed voc fields. Those certificates not based on college degrees are issued in fields of trade and industry and for specific courses in fields of agriculture, home ec, and distributive occupations. Req: meet standards of State Plan for Voc Ed in area to be taught.

MISSISSIPPI: A Certificate. Valid 5 yrs, renewable once for 5 yrs. AA Certificate valid 10 yrs, renewable for 10 yrs. Applicants must take NTE.

Vocational Trades Teacher, Class A. Req: minimum 60 hrs, inc general ed, 48 (English 12, science 12 (bio 3, physical 3), and professional ed (ed psych 3, human development 3, general methods 3, other methods 3), plus 24 months experience at journeyman level in trade.

MONTANA: Class 4 (Special). Issued for vocational, recreational, and adult education teachers presenting training and experience required by U.S. Office of Ed or by special needs of these fields.

NEBRASKA: Provisional trades certificate for teaching areas for which standard institutions provide inadequate preparation are issued on evidence of valid license to practice or teach commercially and on request of superintendent.

NEW JERSEY: Vocational Education. Approved training and experience in occupation.

NEW YORK: Trades Certificate. Req: H.S. grad, apprenticeship and journeyman experience, 32 hrs in specific preparation, pass proficiency exam in trade.

NORTH CAROLINA: Occupational Education Programs (valid for agriculture, ag tech, home ec, distributive ed, trade and industrial ed). Req: bachelor's in approved program and institutional recommendation, and a minimum composite score of 950 on NTE area and common exams.

OKLAHOMA: Secondary, vocational subjects. Req: bachelor's, with credits in specified areas for voc home ec, voc agriculture, and distributive ed, recommendation of state vocational supervisor.

OREGON: Vocational Education. Req: bachelor's with 30 hrs professional ed courses, plus specialization: agriculture 46-2/3, distributive ed 40, trade and industrial and tech 40, home ec 40.

PENNSYLVANIA: Vocational Instructional Certificate. Valid for persons completing nondegree requirements in approved voc programs. Provisional certificate issued for 3 yrs, renewable for 4 yrs on completion of 18 hrs in approved program in field; becomes permanent on 3 yrssatisfactory teaching and 60 hrs in approved program.
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Pennsylvania con't...

Vocational Interim Certificate. Issued at request of employing school district, valid 3 yrs, not renewable. Req: adequate work experience betond learning period in field; completion of approved course in orientation of teaching voc ed; enrollment in appropriate field at accredited college. May be revoked if employment discontinued, performance unsatisfactory, studies discontinued, or on failure to complete the competency requirement for voc instructor certification during first year.

RHODE ISLAND: Vocational Education. Valid in secondary grades. Provisional certificate requires bachelor's, work experience, and 24 hrs in professional and voc ed courses. Temporary certificate (valid 1 yr) requires H.S. grad and partial fulfillment of 24-hr requirement. Professional certificate requires master's or 36 hrs grad study, 3 yrs voc teaching experience under a provisional certificate.

SOUTH CAROLINA: NTE required. Vocational Trade certificate based on training and experience in trade and grade in combined practice and theory exam in trade. College credit not initial requirement, but it is required after first yr and for advancement of certificate.

TEXAS: Trades and Industrial Education. Valid for life. Req: H.S. grad, 2 yrs post-h.s. training, 7 yrs experience in trade, 12 hrs specified teacher ed courses.

VERMONT: Vocational Education (Trades and Industry). Req: 2 yrs recent trade experience, ability to contribure to school program, recommendation from superintendent or committee of peers as competent to teach, acceptance by State Department of Education, Voc-Tech Division.

WASHINGTON: Secondary, Vocational Subjects. Req: must qualify for certification as designated in State Plan. To teach in a regular secondary program, must hold secondary certificate also.

Note: States not listed provided no information about certification in vocational fields. In some cases, as with Massachusetts, this may be because the vocational system is run separately. There was no indication here, except for what can be inferred from the certification requirements, of what type of vocational programs are being offered.

Pinnett, T.M. A Manual on Standards Affecting School Personnel in the United States. 1974 edition. Washington: NEA.